

Claim Amendments

Claims 1-3 (canceled).

1           4. (previously presented) A data storage and retrieval  
2 system comprising:

3           an optical memory constituted as a vitreous fluorescent  
4 photosensitive body selected from the group which consists of  
5 fluorescent photosensitive glass and fluorescent photosensitive  
6 vitreous ceramic constituting an information recording medium; and

7           at least one laser for directing a beam at said memory  
8 and adapted to read stored information from and write information  
9 to be stored to said memory.

1           5. (currently amended) The system defined in claim 4  
2 wherein said memory is composed of a fluorescent photo-sensitive  
3 photosensitive glass.

1           6. (currently amended) The system defined in claim 4  
2 wherein said memory is composed of a fluorescent photosensitive  
3 vitroceramic.

1           7. (previously presented) The system defined in claim 4  
2 which comprises a confocal microscope;

3               a tunable laser having light pulses at a rate of a  
4 maximum of 100 fs for reading and writing from and to said memory  
5 through said confocal microscope;

6               a vertical scanning system and a radial scanning system  
7 for the movement or writing and excitation beams over said memory;

8               an engine for rotating said memory; and

9               an excitation laser having a beam perpendicular to a  
10 fluorescent beam from said memory and provided with a vertical  
11 scanner for reading said memory by a one-photon process.